RCRA INSPECTION REPORT Elan Chemical Co. 268 Doremus Avenue Newark, NJ 07105



Inspector: Abdool Jabar, USEPA, Environmental Engineer

Date of Inspection: 4/4/06, 4/11/06 EPA Handler ID #: NJD042895680

Reason for Inspection: Compliance Evaluation Inspection

Attendees:

Abdool Jabar, USEPA
Ben Armenti. Vice President of Purchasing
Sal Brucato, Production Manager
Jocelyn Manship, Chief Executive Officer
Mary Guerrera, Director of Quality Assurance
Ronald Voelkel, USEPA

Jocelyn Manship, Mary Guerrera and Ronald Voelkel joined the inspection on the second day.

Background:

Elan Incorporated is a privately owned business that is in business for over 30 years and produces natural and synthetic products for the flavor and fragrance industries. The company is made up of two major divisions-Elan Chemical Company and Elan Vanilla Co. Elan Chemical produces aromatic chemical intermediates for the flavor and fragrance industry. This accounts for 75 % of the chemical business, and the remaining 25 % serves the pharmaceutical and petrochemical field. Elan Vanilla Co. is a leading worldwide producer of vanilla products for top ice cream producers and bakeries.

The manufacturing of the fragrances and flavors is done in batches and a number of batches make up a campaign which may run for a few weeks. The facility operates on a 24 hour schedule, 7 days per week. Among company's customers are The Coca Cola Bottling Company, International Flavors and Fragrances and Givaudan.

From a review of the manifests for the past three years and discussion with the facility representative, it was determined that the facility is a Large Quantity Generator (LQG) and generates mostly solvents which are classified as F003 and F005 which are shipped off as hazardous waste. The facility stores its hazardous waste in a hazardous waste tank which has a capacity of \$000 gallons. It collects waste water in 55 gallon drums and it then pumps the waste water in a\$000 gallon tank in which caustic is added to the tank. Water is separated and pumped to a 1,000 gallon tank. After the water is pumped out of the tank, the solvent is then pumped into the 5,000 gallon tank where it is stored until it is shipped off-site.

The inspectors held an opening conference with the facility representative and scope of the inspection was discussed. The facility representative was informed that the inspection was specifically for the Air Emissions-Subpart AA, BB & CC regulations. The facility representative was asked if they were complying with the Air Emission regulations and he stated that they were not complying. The facility representative was asked if there is distillation on site and the facility representative stated that distillation can occur in any of 19 vessels and that each vessel has a condenser and that the facility has an air permit for its distillation processes. After the opening conference, the inspectors and facility representative proceeded on a site tour.

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Inspection Summary Site Tour

The first area visited was the tank farm where the hazardous waste tank (Tank 78) and the separation tank (Tank 77) are located. The facility personnel showed the inspector the area where the drums are placed and the material pumped from the drums to the separation tank in which potassium hydroxide is added. The wastewater separates out and the water is pumped to a 1000 gallon tank from which it is pumped to a sump and discharged to the POTW. There are 6 valves and one pump attached Tank 77. There was also one open-ended pipe associated with Tank 77. There are 9 valves attached to Tank 78. There were two open-ended lines associated with Tank 78. Near to the drum area, there was an open 5 gallon pail which was unlabeled and had material that was pumped from the drums in it. There is no nitrogen blanket in the hazardous waste tank and the lines are not flushed after the hazardous waste is shipped off-site.

The site tour continued with a visit to the QC laboratory. The chemicals were stored alphabetically and not according to compatibility. There were three 5 gallon pails and two 1 gallon bottles storing hazardous waste; 3 of the containers were open and not labeled. There were also some old chemicals stored in this laboratory.

The Research & Development Laboratory was next visited. In the Laboratory itself, the chemicals were stored alphabetically instead of compatibility. There were two rooms adjacent in which were stored numerous containers of old chemicals stored alphabetically instead of by compatibility. Among the chemicals stored were hydrogen chloride gas in a 50 pounds cylinder, chlorine and ethylene oxide in small cylinders, lithium metal and bromine and other chemicals in containers that were in poor condition. The facility representatives were advised to get rid of the chemicals that they will no longer use and to store the remaining chemicals according to their compatibility.

The facility representatives were also asked how they handled their spent fluorescent tubes. They stated that the spent fluorescent tubes were disposed of in the regular garbage. The facility representatives were advised that the spent fluorescent tubes are to be handled as universal waste.

Record Review (Day 1) Vapor pressure calculation

The facility had a vapor pressure calculation for the hazardous waste in the tank at 70 %. The facility was informed that the vapor pressure had to be calculated at the worst case scenario. This was done prior to my second visit and was presented during our record review.

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Initial Subpart CC Inspection

The facility did not do an initial Subpart CC inspection but did a DPCC inspection in 1997 which would have satisfied the requirements of Subpart CC.

Annual Subpart CC Inspections

The facility did not conduct Annual Subpart CC inspections during 2003, 2004 and 2005.

Subpart J Inspections

The Subpart J daily inspections were inadequate. The facility representative did a walk-through the

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facility and did not go inside the tank farm to do a detailed inspection.

At this point the facility representatives were briefed on the violations and were told that the EPA will be continuing the inspection the following week.

The inspection continued on the second day with a walk-through of the tank farm with Jocelyn who has more familiarity with the process giving an explanation. The inspectors wanted to know why the wastewater is not hazardous waste at the point of generation and why is it determined at the point of exit of Tank 77. The inspectors explained to Ms. Manship that as long as the material is more than 10 % solvent then it is a hazardous waste at the point of generation which would be when it exits the reactor or stills. The inspectors asked for analyses of the materials and Ms. Manship promised to provide them. The inspectors and facility representatives went over to the labs and the two chemical storage rooms. The facility is now in the process of identifying the expired and old chemicals and would be shipping them out as hazardous waste shortly.

Record Review (Day 2) Personnel Training

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The personnel training records were reviewed. There was no documentation with the job-title and name of the employee filling the job. There was also no written description of the amount and type of initial and continuing training that would be provided to employees handling hazardous waste.

Contingency Plan

There was no list of equipment nor was there an evacuation plan in the contingency plan. There were no descriptions of the arrangements made with the police, fire department, hospital and state authorities.

Emergency Preparedness

No arrangements were made with the Local Police, Fire Department, Hospitals and State agency in the event of an emergency.

Closing conference

The inspectors and facility representative ended the inspection with a closing conference in which the violations were discussed and what the possible outcomes were. The facility representative was told that a NOV/3007 letter will be issued and based on the response to that letter, an administrative complaint with a penalty may be issued.

Violations

- (1) Failure to have a list of equipment subject to Subpart BB in its operating record.
- (2) Failure to monitor at least one pump on a monthly basis.
- (3) Failure to monitor 15 valves on a monthly basis.
- (4) Failure to cap 3 open-ended valves.
- (5) Failure to list of equipment that is subject to 300 hours exemption and failure to provide the basis for the 300 hours exemption.
- (6) Failure to make the less than 300 hours determination.
- (7) Failure to conduct annual Subpart CC inspections for 2003, 2004 and 2005.
- (8) Failure to make a hazardous waste determination (old chemicals and fluorescent tubes).
- (9) Failure to make arrangements with local authorities.

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- (10) Failure to conduct adequate Subpart J inspections.
- (11) There were three open containers
- (12) There were three unlabeled containers
- (13) There was no list of equipment nor was there an evacuation plan in the contingency plan.
- (14) There were no descriptions of the arrangements made with the police, fire department, hospital and state authorities.
- (15) Copies of contingency plans were not sent to the police, fire department and hospital.
- (16) There was no documentation with the job-title and name of the employee filling the job.
- (17) There was also no written description of the amount and type of initial and continuing training that would be provided to employees handling hazardous waste.

Enforcement

A NOV/3007 will be sent to the facility. Based on the response an appropriate enforcement action will be issued.